AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A process for preparing a compound of formula (IA):

$$\begin{array}{c|c}
O & H & X \\
\hline
& I & I & I \\
\hline
& I &$$

wherein R1 and R2 are each selected from the group consisting of

- (1) hydrogen,
- (2) C_{1-10} alkyl,
- (3) C3-8 cycloalkyl, and
- (4) - $(CH_2)_n$ -phenyl

wherein n is 1 or 2, and said alkyl, cycloalkyl and phenyl are unsubstituted or substituted with one or more halogen, hydroxy, C₁₋₆ alkyl or C₁₋₆ alkoxy;

X is selected from the group consisting of

- (1) halogen, and
- (2) hydrogen; or

pharmaceutically acceptable salts thereof,

comprising:

(A) oxidizing a compound of formula (II):

wherein R³ is selected from the group consisting of

(1) - OH,

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- (2) -O-Ra, and
- (3) -NRbRc,

wherein Ra is selected from the group consisting of

- (a) C1-10 alkyl, and
- (b) C3-8 cycloalkyl,

and Ra is unsubstituted or substituted with one or more

- (i) C₁₋₁₀ alkoxy,
- (ii) hydroxy,
- (iii) halogen,
- (iv) SRd,
- (v) aryl, unsubstituted or substituted with one or more hydroxy, C_{1-10} alkoxy, C_{1-10} alkyl or halogen,
- $\begin{array}{ll} \hbox{$(vi)$} & \hbox{$heteroaryl, unsubstituted or substituted with one or more hydroxy,} \\ \hline C_{1-10} & \hbox{$alkoxy, C_{1-10}} & \hbox{$alkyl or halogen,} \end{array} and$
- (vii) NReRf;

Rb, Rc, Re and Rf are selected from the group consisting of

- (a) halogen
- (b) C₁₋₁₀ alkyl, and
- (c) C₃₋₈ cycloalkyl,
 and when Rb, ,Rc, Re and Rf are C₁₋₁₀ alkyl or C₃₋₈ cycloalkyl, said
 C₁₋₁₀ alkyl and C₃₋₈ cycloalkyl are unsubstituted or substituted with one

or more

- (i) hydroxy,
- (ii) C₁₋₁₀ alkoxy,
- (iii) SRd,
- (iv) aryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀ alkoxy, C₁₋₁₀ alkyl or halogen, and

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(v) heteroaryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀ alkoxy, C₁₋₁₀ alkyl or halogen, and

(vi) NRgRh; wherein Rg and Rh are hydrogen, C₁₋₁₀ alkyl or C₃₋₈ cycloalkyl; or Rb and Re, together with the N atom to which they are attached, form a group

wherein r is 1 or 2, and the NR^bR^e group may be unsubstituted or substituted at the ring carbon atoms by one or more

- - (ii) C₁₋₁₀ alkoxy,
 - (iii) SRd,
 - (iv) aryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀ alkoxy, C₁₋₁₀ alkyl or halogen, and
 - (v) heteroaryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀-alkoxy, C₁₋₁₀ alkyl or halogen, and
 - (vi) NRgRh,

Rd is hydrogen or C1-10 alkyl; and

R4 is selected from the group consisting of

- (1) hydrogen,
- (2) C_{1-10} alkyl,
- (3) $Si-(R^9)(R^{10})(R^{11})$,
- (4) C(=O)-R12, wherein R¹² is selected from the group consisting of
 - (a) C_{1-10} alkyl,
 - (b) C₁₋₁₀ perfluoroalkyl, and

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(c) phenyl which is substituted or unsubstituted with one or more substituents selected from the group consisting of nitro, halogen, C_{1-10} alkyl, and C_{1-10} alkoxy,

- (5) CH2-phenyl, wherein said phenyl is unsubstituted or substituted with one or more substituents selected from the group consisting of nitro, halogen, C1-10 alkyl and C1-10 alkoxy,
- (6) $(CH_2)_p$ -O- $(CH_2)_q$ -X'-R¹⁴,
- (7) tetrahyropyranyl,

wherein R^9 , R^{10} and R^{11} are each C_{1-10} alkyl or phenyl, and R^{14} is selected from the group consisting of

- (a) hydrogen,
- (b) C1-10 alkyl,

p is 1 or 2;

q is an integer selected from 1-10; and

X' is O or a bond;

to form a compound of formula (IV):

(B) deprotecting the compound of formula (IV) to form a compound of formula (V):

(C) reacting the compound of formula (V) with a compound of formula (VI):

$$R^{5}$$
 R^{6} (VI)

wherein R5 and R6 are each independently selected from the group consisting of

- (1) hydrogen,
- (2)(1) C₁₋₁₀ alkyl,
- (3)(2) C3-8 cycloalkyl, and
- (4)(3) (CH₂)_m phenyl,

wherein m is 0, 1 or 2, and

R⁷ is selected from the group consisting of

- (1) hydrogen, and
- (2) Si- $(R^9)(R^{10})(R^{11})$, wherein R^9 , R^{10} and R^{11} are each C_{1-10} alkyl or phenyl; to give a compound of formula (VII):

$$R^{5}$$
 O
 H
 X
 COR^{3}
 H

(D) oxidizing the compound of formula (VII) to give a compound of formula (VIII):

$$R^{5}$$
 O
 H
 COR^{3}
 COR^{3}

(E) converting the compound of formula (VIII) to a compound of formula (IX):

$$R^{5}$$
 O
 H
 $CONH_{2}$
 $H_{2}N$
 CN
 H

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and (F) converting the compound of formula (IX) to the compound of formula (IA).

2. (original): The process of Claim 1 wherein R⁵ and R⁶ are methyl.

- 3. (original): The process of Claim 1 wherein R⁵ and R⁶ are phenyl.
- 4. (original): The process of Claim 1 wherein R³ is methoxy.
- 5. (original): The process of Claim 1 wherein R^1 and R^2 are hydrogen.
- 6. (original): The process of Claim 1 wherein R⁷ is trimethylsilyl.
- 7. (original): The process of Claim 1 wherein X is hydrogen.
- 8. (original): The process of Claim 1 wherein X is fluoro.
- 9. (original): The process of Claim 1 wherein R⁴ is *tert* butyldimethylsilyl.
- 10. (currently amended): A process for preparing a compound of formula (IA):

wherein R¹ and R² are each selected from the group consisting of

- (1) hydrogen,
- (2) C₁₋₁₀ alkyl,
- (3) C3-8 cycloalkyl, and
- (4) –(CH₂)_n –phenyl

wherein n is 1 or 2, and said alkyl, cycloalkyl and phenyl are unsubstituted or substituted with one or more halogen, hydroxy, C_{1-6} alkyl or C_{1-6} alkoxy;

X is selected from the group consisting of

- (1) halogen, and
- (2) hydrogen; and or

pharmaceutically acceptable salts thereof;

comprising converting the compound of formula (IX):

$$R^{6}$$
 R^{5}
 O
 H
 $CONH_{2}$
 CN
 $H_{2}N$
 $CONH_{2}$
 CN

wherein R⁵ and R⁶ are each independently selected from the group consisting of

- (1) hydrogen,
- (2)(1) C₁₋₁₀ alkyl,
- (3)(2) C3-8 cycloalkyl, and
- (4)(3) (CH₂)_m -phenyl,

wherein m is 0, 1 or 2,

to the compound of formula (IA).

- 11. (original): The process of Claim 10 wherein R⁵ and R⁶ are methyl.
- 12. (original): The process of Claim 10 wherein R⁵ and R⁶ are phenyl.
- 13. (original): The process of Claim 10 wherein X is fluoro.
- 14. (original): The process of Claim 10 wherein X is hydrogen.
- 15. (currently amended): A process for preparing a compound of formula (II):

wherein R³ is selected from the group consisting of

- (1) OH,
- (2) -O-Ra, and
- (3) NRbRc

wherein Ra is selected from the group consisting of

- (a) C₁₋₁₀ alkyl, and
- (b) C₃₋₈ cycloalkyl,

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and Ra is unsubstituted or substituted with one or more

- (i) C_{1-10} alkoxy,
- (ii) hydroxy,
- (iii) halogen,
- (iv) SRd,
- (v) aryl, unsubstituted or substituted with one or more hydroxy, C_{1-10} alkoxy, C_{1-10} alkyl or halogen,
- (vi) heteroaryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀-alkoxy, C₁₋₁₀ alkyl or halogen, and
- (vii) NReRf;

Rb, Rc, Re and Rf are selected from the group consisting of

- (a) hydrogen,
- (b) C_{1-10} alkyl, and
- (c) C3-8 cycloalkyl,
 and when Rb, Rc, Re or Rf are C1-10 alkyl or C3-8 cycloalkyl, said C1-10
 alkyl and C3-8 cycloalkyl are unsubstituted or substituted with one or
 more
 - (i) hydroxy,
 - (ii) C₁₋₁₀ alkoxy,
 - (iii) SRd,
 - (iv) aryl, unsubstituted or substituted with one or more hydroxy, C_{1-10} alkoxy, C_{1-10} alkyl or halogen, and
 - _(v) heteroaryl, unsubstituted or substituted with one or more hydroxy, C1_10_alkoxy, C1_10_alkyl or halogen, and
 - (vi) NRgRh;

wherein Rg and Rh are hydrogen, C₁₋₁₀ alkyl or C₃₋₈ cycloalkyl;

or Rb and Re, together with the N atom to which they are attached, form a group

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wherein r is 1 or 2, and the NR^bR^e group may be unsubstituted or substituted at the ring carbon atoms by one or more

- (i) hydroxy,
- (ii) C₁₋₁₀-alkoxy,
- (iii) SRd,
- (iv) aryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀ alkoxy, C₁₋₁₀ alkyl or halogen, and
- (v) heteroaryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀-alkoxy, C₁₋₁₀ alkyl or halogen, and
- (vi) NRgRh,

Rd is hydrogen or C1-10 alkyl;

X is selected from the group consisting of

- (1) halogen, and
- (2) hydrogen;

 R^4 is selected from the group consisting of

- (1) hydrogen,
- (2) C₁₋₁₀ alkyl,
- (3) $Si-(R^9)(R^{10})(R^{11})$,
- (4) C(=O)-R¹², wherein R¹² is selected from the group consisting of
 - (a) C_{1-10} alkyl,
 - (b) C_{1-10} perfluoroalkyl, and
 - (c) phenyl which is substituted or unsubstituted with one or more substituents selected from the group consisting of nitro, halogen, C_{1-10} alkyl, and C_{1-10} alkoxy,
- (5) CH₂-phenyl, wherein said phenyl is unsubstituted or substituted with one or more substituents selected from the group consisting of nitro, halogen, C₁₋₁₀ alkyl and C₁₋₁₀ alkoxy,

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(6) $(CH_2)_p$ -O- $(CH_2)_q$ -X'-R¹⁴,

(7) tetrahyropyranyl,

wherein R^9 , R^{10} and R^{11} are each $C_{1\text{--}10}$ alkyl or phenyl, and R^{14} is selected from the group consisting of

- (a) hydrogen,
- (b) C₁₋₁₀ alkyl,

p is 1 or 2;

q is an integer of from 1-10; and

X' is O or a bond;

comprising:

(A) converting a compound of formula (X):

$$COR^3$$
 (X)

to a compound of formula (XI):

$$COR^3$$
 (XI)

and (B) reacting a compound of formula (XI) with a base in the presence of a Lewis acid to give a compound of formula (II).

16. (previously presented): The process of Claim 15 wherein the conversion of a compound of formula (X) to a compound of formula (XI) comprises the step of subjecting a compound of formula (X) to epoxidation in the presence of a peroxide source and a catalytic amount of VO(acac)2.

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17. (previously presented): The process of Claim 15 wherein the conversion of a compound of formula (X) to a compound of formula (XI) comprises treating the compound of formula (X) with a halogenating agent, followed by treatment with a base.

- 18. (original): The process of Claim 15 wherein X is fluoro.
- 19. (original): The process of Claim 15 wherein X is hydrogen.
- 20. (previously presented): The process of Claim 15, further comprising the step of oxidizing the compound of formula (II) to form a compound of formula (IV)

- 21. (original): The process of Claim 20 wherein X is fluoro.
- 22. (original): The process of Claim 20 wherein X is hydrogen.
- 23. (currently amended): A process for preparing a compound of formula (XII)

wherein R³ is selected from the group consisting of

- (1) OH,
- (2) -O-Ra, and
- $(3) NR^bR^c$,

wherein Ra is selected from the group consisting of

- (a) C_{1-10} alkyl, and
- (b) C3-8 cycloalkyl,

and Ra is unsubstituted or substituted with one or more

- (i) C₁₋₁₀ alkoxy,
- (ii) hydroxy,
- (iii) halogen,

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(iv) SRd,

- (v) aryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀ alkoxy, C₁₋₁₀ alkyl or halogen,
- (vi) heteroaryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀-alkoxy, C₁₋₁₀ alkyl or halogen, and
- (vii) NReRf;

Rb, Rc, Re and Rf are selected from the group consisting of

- (a) hydrogen,
- (b) C₁₋₁₀ alkyl, and
- (c) C₃₋₈ cycloalkyl,
 and when Rb, Rc, Re and Rf are C₁₋₁₀ alkyl or C₃₋₈ cycloalkyl, said
 C₁₋₁₀ alkyl and C₃₋₈ cycloalkyl are unsubstituted or substituted with one

or more

- (i) hydroxy,
- (ii) C₁₋₁₀ alkoxy,
- (iii) SRd,
- (iv) aryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀ alkoxy, C₁₋₁₀ alkyl or halogen, and
- $\underline{\text{(v)} \quad \text{heteroaryl, unsubstituted or substituted with one or more hydroxy,} } \\ \underline{\text{C}_{1-10-alkoxy, C}_{1-10-alkyl-or-halogen, and}}$
- (vi) NRgRh;

wherein Rg and R^h are hydrogen, C_{1-10} alkyl or C_{3-8} cycloalkyl;

or Rb and Re, together with the N atom to which they are attached, form a group

wherein r is 1 or 2, and the NR^bRe group may be unsubstituted or substituted at the ring carbon atoms by one or more

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(i) hydroxy,

(ii) C₁₋₁₀-alkoxy,

(iii) SRd,

(iv) aryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀ alkoxy, C₁₋₁₀ alkyl or halogen, and

(v) heteroaryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀ alkoxy, C₁₋₁₀ alkyl or halogen, and

(vi) NRgRh,

Rd is hydrogen or C₁₋₁₀ alkyl;

X is selected from the group consisting of

- (1) halogen, and
- (2) hydrogen;

comprising:

(A) converting a compound of formula (II)

wherein R⁴ is selected from the group consisting of

- (1) hydrogen,
- (2) C_{1-10} alkyl,
- $(3) Si-(R^9)(R^{10})(R^{11}),$
- (4) C(=O)-R¹², wherein R¹² is selected from the group consisting of
 - (a) C₁₋₁₀ alkyl,
 - (b) $C_{1\text{--}10}$ perfluoroalkyl, and
 - (c) phenyl which is substituted or unsubstituted with one or more substituents selected from the group consisting of nitro, halogen, C_{1-10} alkyl, and C_{1-10} alkoxy,

(5) CH₂-phenyl, wherein said phenyl is unsubstituted or substituted with one or more substituents selected from the group consisting of nitro, halogen, C₁₋₁₀ alkyl and C₁₋₁₀ alkoxy,

- (6) $(CH_2)_p$ -O- $(CH_2)_q$ -X'-R¹⁴,
- (7) tetrahyropyranyl,

wherein R⁹, R¹⁰ and R¹¹ are each C₁₋₁₀ alkyl or phenyl, and R¹⁴ is selected from the group consisting of

- (a) hydrogen,
- (b) C₁₋₁₀ alkyl,

p is 1 or 2;

q is an integer of from 1-10; and

X' is O or a bond;

to a compound of formula (XIII)

$$R^8$$
, H X COR^3 $(XIII)$ OR^4

wherein R⁸ is selected from the group consisting of

- (1) halogen, and
- (2) O-SO₂-R¹², wherein R¹² is selected from the group consisting of
 - (a) C_{1-10} alkyl,
 - (b) C_{1-10} perfluoroalkyl, and
 - (c) phenyl which is substituted or unsubstituted with one or more substituents selected from the group consisting of nitro, halogen, C_{1-10} alkyl, and C_{1-10} alkoxy,
- (B) removing R^4 to form a compound of formula (XIV)

and (C) oxidizing the compound of formula (XIV) to form the compound of formula (XII).

- 24. (original): The process of claim 23 wherein R³ is methoxy.
- 25. (currently amended): A process for preparing a compound of formula (XII')

wherein R³ is selected from the group consisting of

- (1) OH,
- (2) -O-Ra, and
- $(3) NR^bR^c$,

wherein Ra is selected from the group consisting of

- (a) C1-10 alkyl, and
- (b) C3-8 cycloalkyl,

and Ra is unsubstituted or substituted with one or more

- (i) C_{1-10} alkoxy,
- (ii) hydroxy,
- (iii) halogen,
- (iv) SRd,
- (v) aryl, unsubstituted or substituted with one or more hydroxy, C_{1-10} alkoxy, C_{1-10} alkyl or halogen,
- (vi) heteroaryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀ alkoxy, C₁₋₁₀ alkyl or halogen, and
- (vii) NReRf;

 $Rb,\, and\, Rc$, Re and Rf are selected from the group consisting of

- (a) hydrogen,
- (b) C₁₋₁₀ alkyl, and
- (c) C₃₋₈ cycloalkyl, and when Rb, Rc, Re and Rf are C₁₋₁₀ alkyl or C₃₋₈ cycloalkyl, said

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C₁₋₁₀ alkyl and C₃₋₈ cycloalkyl are unsubstituted or substituted with one or more

- (i) hydroxy,
- (ii) C₁₋₁₀ alkoxy,
- (iii) SRd,
- (iv) aryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀ alkoxy, C₁₋₁₀ alkyl or halogen,
- (v) heteroaryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀-alkoxy, C₁₋₁₀ alkyl or halogen, and
- (vi) NRgRh;

wherein Rg and R^h are selected from the group consisting of hydrogen, C_{1-10} alkyl or C_{3-8} cycloalkyl;

Rd is hydrogen or C₁₋₁₀ alkyl;

or Rb and Re, together with the N atom to which they are attached, form a group

wherein r is 1 or 2, and the NR^bR^e group may be unsubstituted or substituted at the ring carbon atoms by one or more

(i)hydroxy,

(ii)C₁₋₁₀-alkoxy,

(iii)SRd,

- (iv) aryl, unsubstituted or substituted with one or more hydroxy, C_{1-10} alkoxy, C_{1-10} alkyl or halogen, and
- (v) heteroaryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀ alkoxy, C₁₋₁₀ alkyl or halogen, and

(vi) NRgRh,

X is selected from the group consisting of

(1) halogen, and

(2) hydrogen; and

R⁴ is selected from the group consisting of

- (1) hydrogen,
- (2) C₁₋₁₀ alkyl,
- (3) $Si-(R^9)(R^{10})(R^{11})$,
- (4) C(=O)-R12, wherein R¹² is selected from the group consisting of
 - (a) C_{1-10} alkyl,
 - (b) C₁₋₁₀ perfluoroalkyl, and
- (c) phenyl which is substituted or unsubstituted with one or more substituents selected from the group consisting of nitro, halogen, C_{1-10} alkyl, and C_{1-10} alkoxy,
- (5) CH₂-phenyl, wherein said phenyl is unsubstituted or substituted with one or more substituents selected from the group consisting of nitro, halogen, C₁₋₁₀ and C₁₋₁₀ alkoxy,
- (6) $(CH_2)_p$ -O- $(CH_2)_q$ -X'-R¹⁴,
- (7) tetrahyropyranyl,

wherein R^9 , R^{10} and R^{11} are each C_{1-10} alkyl or phenyl, and R^{14} is selected from the group consisting of

- (a) hydrogen,
- (b) C₁₋₁₀ alkyl;

p is 1 or 2;

q is an integer of from 1-10; and

X' is O or a bond;

comprising converting a compound of formula (IV)

$$O = \bigcup_{i=1}^{H} X$$
 (IV)

to a compound of formula (XII').

26. (currently amended): A compound of formula (VII):

wherein R³ is selected from the group consisting of

- (1) OH,
- (2) –O-Ra, and
- $(3) NR^bR^c$,

wherein Ra is selected from the group consisting of

- (a) C1-10 alkyl, and
- (b) C3-8 cycloalkyl,

and Ra is unsubstituted or substituted with one or more

- (i) C₁₋₁₀ alkoxy,
- (ii) hydroxy,
- (iii) halogen,
- (iv) SRd,
- (v) aryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀ alkoxy, C₁₋₁₀ alkyl or halogen,
- (vi) heteroaryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀-alkoxy, C₁₋₁₀ alkyl or halogen, and
- (vii) NReRf;

Rb, Rc, Re and Rf are selected from the group consisting of

- (a) hydrogen,
- (b) C₁₋₁₀ alkyl, and
- (c) C3-8 cycloalkyl,

and when R^b , R^c , R^e and R^f are $C_{1\text{--}10}$ alkyl or $C_{3\text{--}8}$ cycloalkyl, said $C_{1\text{--}10}$ alkyl and $C_{3\text{--}8}$ cycloalkyl are unsubstituted or substituted with one or more

- (i) hydroxy,
- (ii) C₁₋₁₀ alkoxy,
- (iii) SRd,
- (iv) aryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀ alkoxy, C₁₋₁₀ alkyl or halogen,
- (v) heteroaryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀ alkoxy, C₁₋₁₀ alkyl or halogen, and
- (vii) NRgRh;

wherein Rg and $R^{\mbox{\scriptsize h}}$ are selected from the group consisting of hydrogen, $C_{\mbox{\scriptsize 1-10}}$

alkyl or

C₃₋₈ cycloalkyl

Rd is hydrogen or C₁₋₁₀ alkyl;

or Rb and Re, together with the N atom to which they are attached, form a group



wherein r is 1 or 2, and the NR^bR^c group may be unsubstituted or substituted at the ring carbon atoms by one or more

- (i) hydroxy,
- (ii) C₁₋₁₀ alkoxy,
- (iii) SRd,
- $\begin{array}{ll} \hbox{(iv)} & \text{aryl, unsubstituted or substituted with one or more hydroxy, C_{1-10} alkoxy, C_{1-10} alkyl or halogen, and } \end{array}$
- (v) heteroaryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀ alkoxy, C₁₋₁₀ alkyl or halogen, and
- (vi) NRgRh,

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 ${\rm R}^5$ and ${\rm R}^6$ are independently selected from the group consisting of

- (1) hydrogen,
- (2)(1) C₁₋₁₀ alkyl,
- (3)(2) C₃₋₈ cycloalkyl, and
- (4)(3) (CH₂)_m -phenyl,

wherein m is 0, 1 or 2; and

X is selected from the group consisting of

- (1) halogen, and
- (2) hydrogen;

and-or salts thereof.

27. (currently amended): A compound of formula (VIII):

$$R^{5}$$
 O
 H
 X
 COR^{3}
 H
 O
 H
 O

wherein R³ is selected from the group consisting of

- (1) OH,
- (2) –O- R^a , and
- (3) NRbRc,

wherein Ra is selected from the group consisting of

- (a) C_{1-10} alkyl, and
- (b) C3-8 cycloalkyl,

and Ra is unsubstituted or substituted with one or more

- (i) C₁₋₁₀ alkoxy,
- (ii) hydroxy,
- (iii) halogen,
- (iv) SRd,

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(v) aryl, unsubstituted or substituted with one or more hydroxy, C_{1-10} alkoxy, C_{1-10} alkyl or halogen,

- (vi) heteroaryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀ alkoxy, C₁₋₁₀ alkyl or halogen, and
- (vii) NReRf;

Rb, Rc, Re and Rf are selected from the group consisting of

- (a) hydrogen,
- (b) C₁₋₁₀ alkyl, and
- (c) C₃₋₈ cycloalkyl,
 and when Rb, Rc, Re and Rf are C₁₋₁₀ alkyl or C₃₋₈ cycloalkyl, said
 C₁₋₁₀ alkyl and C₃₋₈ cycloalkyl are unsubstituted or substituted with one or more
 - (i) hydroxy,
 - (ii) C₁₋₁₀ alkoxy,
 - (iii) SRd,
 - (iv) aryl, unsubstituted or substituted with one or more hydroxy, C_{1-10} alkoxy, C_{1-10} alkyl or halogen, and
 - _(v) heteroaryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀-alkoxy, C₁₋₁₀ alkyl or halogen, and
 - (vi) NRgRh;

wherein Rg and Rh are hydrogen, C1-10 alkyl or C3-8 cycloalkyl;

Rd is hydrogen or C1-10 alkyl;

or Rb and Re, together with the N atom to which they are attached, form a group



wherein r is 1 or 2, and the NRbRe group may be unsubstituted or substituted at the ring carbon atoms by one or more

(i) hydroxy,

(ii) C₁₋₁₀-alkoxy,

(iii) SRd,

(iv) aryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀ alkoxy, C₁₋₁₀ alkyl or halogen, and

(v) heteroaryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀ alkoxy, C₁₋₁₀ alkyl or halogen, and

(vi) NRgRh,

R⁵ and R⁶ are independently selected from the group consisting of

- (1) hydrogen,
- (2)(1) C₁₋₁₀ alkyl,
- (3)(2) C3-8 cycloalkyl, and
- (4)(3) (CH₂)_m phenyl,

wherein m is 0, 1 or 2; and

X is selected from the group consisting of

- (1) halogen, and
- (2) hydrogen;

and or salts thereof.

28. (currently amended): A compound of formula (IX):

$$R^{5}$$
 O
 H_{2}
 $CONH_{2}$
 H_{2}
 CN
 CN

wherein R5 and R6 are independently selected from the group consisting of

- (1) hydrogen,
- (2)(1) C₁₋₁₀ alkyl,
- (3)(2) C₃₋₈ cycloalkyl, and
- (4)(3) (CH₂)_m -phenyl,

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wherein m is 0, 1 or 2; and

X is selected from the group consisting of

- (1) halogen, and
- (2) hydrogen;

and or salts thereof.

29. (currently amended): A compound of formula (XA):

$$COR^3$$
 (XA)

wherein R³ is selected from the group consisting of

- (1) OH,
- (2) –O-Ra, and
- (3) –NRbRc,

wherein Ra is selected from the group consisting of

- (a) C_{1-10} alkyl, and
- (b) C3-8 cycloalkyl,

and Ra is unsubstituted or substituted with one or more

- (i) C₁₋₁₀ alkoxy,
- (ii) hydroxy,
- (iii) halogen,
- (iv) SRd,
- (v) aryl, unsubstituted or substituted with one or more hydroxy, C_{1-10} alkoxy, C_{1-10} alkyl or halogen,
- (vi) heteroaryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀ alkoxy, C₁₋₁₀ alkyl or halogen, and
- (vii) NReRf;

Rb, Rc, Re and Rf are selected from the group consisting of

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- (a) hydrogen,
- (b) C_{1-10} alkyl, and
- (c) C3-8 cycloalkyl,
 and when Rb, Rc, Re and Rf are C1-10 alkyl or C3-8 cycloalkyl, said C110 alkyl and C3-8 cycloalkyl are unsubstituted or substituted with one or
 more
 - (i) hydroxy,
 - (ii) C₁₋₁₀ alkoxy,
 - (iii) SRd,
 - (iv) aryl, unsubstituted or substituted with one or more hydroxy, C_{1-10} alkoxy, C_{1-10} alkyl or halogen, and
 - $\underline{\text{(v)} \text{heteroaryl, unsubstituted or substituted with one or more hydroxy,} } \\ C_{1-10 \text{ alkoxy, } C_{1-10 \text{ alkyl or halogen, and} }$
 - (vi) NRgRh;

wherein Rg and Rh are hydrogen, C₁₋₁₀ alkyl or C₃₋₈ cycloalkyl; or Rb and Re, together with the N atom to which they are attached, form a group



wherein r is 1 or 2, and the NR^bR^c group may be unsubstituted or substituted at the ring carbon atoms by one or more

- (i) hydroxy,
- (ii) C₁₋₁₀ alkoxy,
- (iii) SRd,
- (iv) aryl, unsubstituted or substituted with one or more hydroxy, C_{1-10} alkoxy, C_{1-10} alkyl or halogen, and
- (v) heteroaryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀-alkoxy, C₁₋₁₀ alkyl or halogen, and
- (vi) NRgRh,

Rd is hydrogen or C₁₋₁₀ alkyl;

andor salts thereof.

30. (currently amended): A compound of formula (XI):

$$COR^3$$
 (XI)

wherein R³ is selected from the group consisting of

- (1) OH,
- (2) -O-Ra, and
- $(3) NR^bR^c$,

wherein Ra is selected from the group consisting of

- (a) C₁₋₁₀ alkyl, and
- (b) C3-8 cycloalkyl,

and Ra is unsubstituted or substituted with one or more

- (i) C₁₋₁₀ alkoxy,
- (ii) hydroxy,
- (iii) halogen,
- (iv) SRd,
- (v) aryl, unsubstituted or substituted with one or more hydroxy, C_{1-10} alkoxy, C_{1-10} alkyl or halogen,
- $\frac{(vi) \text{heteroaryl, unsubstituted or substituted with one or more hydroxy,}}{\text{C}_{1-10} \text{ alkoxy, C}_{1-10} \text{ alkyl or halogen,}} \text{and}$
- (vii) NReRf;

Rb, Rc, Re and Rf are selected from the group consisting of

- (a) hydrogen,
- (b) C₁₋₁₀ alkyl, and
- (c) C3-8 cycloalkyl,

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and when R^b , R^c , R^e and R^f are C_{1-10} alkyl or C_{3-8} cycloalkyl, said C_{1-10} alkyl and C_{3-8} cycloalkyl are unsubstituted or substituted with one or more

- (i) hydroxy,
- (ii) C₁₋₁₀ alkoxy,
- (iii) SRd,
- (iv) aryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀ alkoxy, C₁₋₁₀ alkyl or halogen, and
- (v) heteroaryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀ alkoxy, C₁₋₁₀ alkyl or halogen, and
- (vi) NRgRh;

wherein Rg and Rh are hydrogen, C₁₋₁₀ alkyl or C₃₋₈ cycloalkyl;

or Rb and Re, together with the N atom to which they are attached, form a group



wherein r is 1 or 2, and the NR^bR^e group may be unsubstituted or substituted at the ring carbon atoms by one or more

- (i) hydroxy,
- (ii) C₁₋₁₀-alkoxy,
- (iii) SRd,
- (iv) aryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀ alkoxy, C₁₋₁₀ alkyl or halogen, and
- (v) heteroaryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀-alkoxy, C₁₋₁₀-alkyl or halogen, and
- (vi) NRgRh,

Rd is hydrogen or C₁₋₁₀ alkyl;

 R^4 is selected from the group consisting of

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- (1) hydrogen,
- (2) C₁₋₁₀ alkyl,
- (3) $Si-(R^9)(R^{10})(R^{11})$,
- (4) C(=O)-R¹², wherein R¹² is selected from the group consisting of
 - (a) C_{1-10} alkyl,
 - (b) C₁₋₁₀ perfluoroalkyl, and
- (c) phenyl which is substituted or unsubstituted with one or more substituents selected from the group consisting of nitro, halogen, C_{1-10} alkyl, and C_{1-10} alkoxy,
- (5) CH₂-phenyl, wherein said phenyl is unsubstituted or substituted with one or more substituents selected from the group consisting of nitro, halogen, C₁₋₁₀ alkyl and C₁₋₁₀ alkoxy,
- (6) $(CH_2)_p$ -O- $(CH_2)_q$ -X'-R¹⁴,
- (7) tetrahyropyranyl,

wherein R^9 , R^{10} and R^{11} are each C_{1-10} alkyl or phenyl, and R^{14} is selected from the group consisting of

- (a) hydrogen,
- (b) C₁₋₁₀ alkyl,

p is 1 or 2;

q is an integer of from 1-10; and

X' is O or a bond;

X is selected from the group consisting of

- (1) halogen, and
- (2) hydrogen;

and or salts thereof.

31. (currently amended): A compound of formula (IVA):

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wherein X is selected from the group consisting of

- (1) halogen, and
- (2) hydrogen; and

R4 is selected from the group consisting of

- (1) hydrogen,
- (2) C_{1-10} alkyl,
- (3) $Si-(R^9)(R^{10})(R^{11})$,
- (4) C(=O)-R¹², wherein R¹² is selected from the group consisting of
 - (a) C_{1-10} alkyl,
 - (b) C₁₋₁₀ perfluoroalkyl, and
 - (c) phenyl which is substituted or unsubstituted with one or more substituents selected from the group consisting of nitro, halogen, C_{1-10} alkyl, and C_{1-10} alkoxy,
- (5) CH₂-phenyl, wherein said phenyl is unsubstituted or substituted with one or more substituents selected from the group consisting of nitro, halogen, C₁₋₁₀ alkyl and C₁₋₁₀ alkoxy,
- (6) $(CH_2)_p$ -O- $(CH_2)_q$ –X'-R¹⁴, and
- (7) tetrahyropyranyl,

wherein R^9 , R^{10} and R^{11} are each $C_{1\text{--}10}$ alkyl or phenyl, and R^{14} is selected from the group consisting of

- (a) hydrogen,
- (b) C_{1-10} alkyl,

p is 1 or 2;

q is an integer of from 1-10; and

X' is O or a bond;

and or salts thereof.

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32. (currently amended): A compound of formula (II):

HO
$$\frac{H}{1000}$$
 $\frac{X}{1000}$ $\frac{H}{1000}$ $\frac{X}{1000}$ $\frac{X}{1000}$ $\frac{H}{1000}$ $\frac{X}{1000}$ $\frac{X}{1000}$

wherein R³ is selected from the group consisting of

- (1) OH,
- (2) –O-Ra, and
- (3) NRbRc,

wherein Ra is selected from the group consisting of

- (a) C1-10 alkyl, and
- (b) C3-8 cycloalkyl,

and Ra is unsubstituted or substituted with one or more

- (i) C₁₋₁₀ alkoxy,
- (ii) hydroxy,
- (iii) halogen,
- (iv) SRd,
- (v) aryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀ alkoxy, C₁₋₁₀ alkyl or halogen,
- (vi) heteroaryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀ alkoxy, C₁₋₁₀ alkyl or halogen, and
- (vii) NReRf;

Rb, Rc, Re and Rf are selected from the group consisting of

- (a) hydrogen,
- (b) C₁₋₁₀ alkyl, and
- (c) C₃₋₈ cycloalkyl, and when R^b, R^c, R^e and R^f are C₁₋₁₀ alkyl or C₃₋₈ cycloalkyl, said

C₁₋₁₀ alkyl and C₃₋₈ cycloalkyl are unsubstituted or substituted with one or more

- (i) hydroxy,
- (ii) C₁₋₁₀ alkoxy,
- (iii) SRd,
- (iv) aryl, unsubstituted or substituted with one or more hydroxy, C_{1-10} alkoxy, C_{1-10} alkyl or halogen, and
- (v) heteroaryl, unsubstituted or substituted with one or more hydroxy, C1_10_alkoxy, C1_10_alkyl or halogen, and
- (vi) NRgRh;

wherein Rg and Rh are hydrogen, C1-10 alkyl or C3-8 cycloalkyl;

or Rb and Re, together with the N atom to which they are attached, form a group



wherein r is 1 or 2, and the NR^bR^c group may be unsubstituted or substituted at the ring carbon atoms by one or more

- (i) hydroxy,
- (ii) C₁₋₁₀ alkoxy,
- (iii) SRd,
- (iv) aryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀ alkoxy, C₁₋₁₀ alkyl or halogen, and
- (v) heteroaryl, unsubstituted or substituted with one or more hydroxy, C₁₋₁₀ alkoxy, C₁₋₁₀ alkyl or halogen, and
- (vi) NRgRh,

Rd is hydrogen or C1-10 alkyl;

R4 is selected from the group consisting of

- (1) hydrogen,
- (2) C_{1-10} alkyl,

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- (3) $Si-(R^9)(R^{10})(R^{11})$,
- (4) C(=O)-R¹², wherein R¹² is selected from the group consisting of
 - (a) C_{1-10} alkyl,
 - (b) C₁₋₁₀ perfluoroalkyl, and
- (c) phenyl which is substituted or unsubstituted with one or more substituents selected from the group consisting of nitro, halogen, C_{1-10} alkyl, and C_{1-10} alkoxy,
- (5) CH₂-phenyl, wherein said phenyl is unsubstituted or substituted with one or more substituents selected from the group consisting of nitro, halogen, C₁₋₁₀ alkyl and C₁₋₁₀ alkoxy,
- (6) $(CH_2)_p$ -O- $(CH_2)_q$ –X'-R¹⁴, and
- (7) tetrahydropyranyl,

wherein R9, R10 and R11 are each C1-10 alkyl or phenyl, and

R¹⁴ is selected from the group consisting of

- (a) hydrogen,
- (b) C₁₋₁₀ alkyl,

p is 1 or 2;

q is an integer of from 1-10; and

X' is O or a bond;

X is selected from the group consisting of

- (1) halogen, and
- (2) hydrogen;

and or salts thereof.

33. -36. (canceled).